

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 9789
Order No. R-9085

APPLICATION OF MOBIL PRODUCING
TEXAS & NEW MEXICO INC FOR POOL
CREATION AND SPECIAL POOL RULES
OR, IN THE ALTERNATIVE, FOR POOL
EXTENSION, RIO ARRIBA COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 15, 1989, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of January, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Mobil Producing Texas & New Mexico Inc., seeks the creation of a new pool for the production of oil from the Mancos formation, said pool to comprise all of Section 15, Township 23 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, and for the promulgation of special rules and regulations therefor including provisions for 640-acre spacing and proration units, designated well location requirements, and the assignment of a special depth bracket allowable. IN THE ALTERNATIVE, the applicant seeks to extend the West Puerto Chiquito-Mancos Pool to include all of Sections 3, 10 and 15, Township 23 North, Range 1 West, NMPM.

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(3) The applicant further requests that the effective date for any order issued in this case be the date of the hearing (November 15, 1989).

(4) The applicant is the owner and operator of the Badland Hills "15" Well No. 1 located 1775 feet from the North line and 990 feet from the West line (Unit E) of said Section 15, which has recently been drilled and successfully tested and completed in the Mancos formation.

(5) The subject well is located approximately one and one-half miles southwest of the outer boundary of the West Puerto Chiquito-Mancos Oil Pool, which is currently governed by special rules and regulations including 640-acre spacing and proration units, designated well locations, and a special depth bracket allowable of 800 barrels of oil per day, all as promulgated by Division Order Nos. R-2565, as amended, R-6469, as amended, and R-7407, as amended.

(6) The applicant contends that said Badland Hills "15" Well No. 1 has discovered a separate common source of supply in the Mancos formation and in support thereof presented geologic and engineering evidence and testimony at the hearing.

(7) The engineering evidence presented indicates that the initial reservoir pressure encountered in the Mancos formation by the Badland Hills "15" Well No. 1 is approximately 1824 psi.

(8) The engineering evidence presented further indicates that said reservoir pressure is in line with the initial reservoir pressures encountered in various other Mancos pools in this area, including the West Puerto Chiquito-Mancos Oil Pool.

(9) The Division has found, through extensive geologic and engineering evidence presented in previously heard cases concerning the West Puerto Chiquito-Mancos and Gavilan-Mancos Oil Pools, that the Mancos formation in this area generally contains a major fracture system which has demonstrated high transmissibility between wells, particularly in a north-south direction.

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(10) The applicant, through its geologic evidence and testimony presented, did not demonstrate the existence of a fracture or permeability barrier between the Mancos formation in the subject well and the West Puerto Chiquito-Mancos Oil Pool; however, the geologic evidence does show extensive faulting in this area which may eventually be determined to be a factor in reservoir separation.

(11) The evidence indicates that the subject well is either in fact effectively isolated from the West Puerto Chiquito-Mancos Oil Pool or has simply not encountered the major fracture system within the Mancos formation in this area.

(12) Based upon the evidence currently available, a new pool for the production of oil from the Mancos formation should be created and designated the Badland Hills-Mancos Oil Pool, with horizontal limits comprising all of Section 15, Township 23 North, Range 1 West, NMPM, Rio Arriba County, New Mexico.

(13) There is ample evidence available (as described in Finding No. 9 above) to indicate that the appropriate well spacing in the Mancos formation in this area should be 640 acres.

(14) In order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells and to otherwise protect correlative rights, temporary special rules and regulations providing for 640-acre spacing and proration units should be promulgated for the subject pool.

(15) The temporary special rules and regulations should also provide for restrictive well locations in order to assure orderly development of the pool and protect correlative rights.

(16) The applicant requested that wells be located no closer than 990 feet from the outer boundary of the proration unit nor closer than 10 feet from any interior quarter-quarter section line or subdivision inner boundary.

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(17) The special rules and regulations for the West Puerto Chiquito-Mancos Oil Pool require that wells be located no closer than 1650 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter section line.

(18) The evidence presented by the applicant does not geologically or topographically justify the additional well location flexibility as proposed and therefore the well location requirements for the Badland Hills-Mancos Oil Pool should conform to those currently being utilized in the West Puerto Chiquito-Mancos Oil Pool.

(19) The special rules and regulations promulgated herein should conform as much as possible to the special rules and regulations currently being utilized in the West Puerto Chiquito-Mancos Oil Pool inasmuch as the two pools may eventually be contiguous, or it may eventually be determined that the subject acreage is in fact within the West Puerto Chiquito-Mancos Oil Pool.

(20) The temporary special rules and regulations promulgated herein should remain in effect for a period of 18 months in order to allow the operator(s) in the subject pool to gather sufficient reservoir information to show that a 640-acre unit in the subject pool can be efficiently and economically drained and developed by one well, and to conclusively demonstrate that the subject pool is in fact a new common source of supply.

(21) This case should be reopened at an examiner hearing in June, 1991, at which time the operator(s) in the subject pool should be prepared to appear and show cause why the Badland Hills-Mancos Oil Pool should not be abolished and/or the special rules and regulations promulgated herein should not be rescinded.

(22) Should continued development in this area prior to June, 1991, demonstrate that the acreage in said Section 15 is actually within the West Puerto Chiquito-Mancos Oil Pool, the Division Director should have the authority, after notice and hearing, to abolish the Badland Hills-Mancos Oil Pool and concomitantly expand the boundary of the West Puerto Chiquito-Mancos Oil Pool.

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IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Mobil Producing Texas & New Mexico Inc., a new pool in Rio Arriba County, New Mexico, classified as an oil pool for Mancos production, is hereby created and designated the Badland Hills-Mancos Oil Pool, with horizontal limits comprising the following described acreage:

TOWNSHIP 23 NORTH, RANGE 1 WEST, NMPM
Section 15: All

(2) Temporary Special Rules for said pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
BADLAND HILLS-MANCOS OIL POOL

RULE 1. Each well completed or recompleted in the Badland Hills-Mancos Oil Pool or in the Mancos formation within one mile thereof, and not nearer to or within the limits of another designated Mancos Pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, which shall comprise a single governmental section, being a legal subdivision of the United States Public Lands Survey. For purposes of these rules, a spacing or proration unit consisting of between 632 and 648 contiguous surface acres shall be considered a standard spacing or proration unit. No non-standard spacing or proration unit shall be authorized except after notice and hearing.

RULE 3. The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without hearing when an application has been filed for a non-standard unit comprising all of a single governmental section but comprising less than 632 acres or more than 648 acres resulting from a variation in the legal subdivision of the United States Public Lands Survey. All operators offsetting the proposed non-standard unit shall

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be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

RULE 4. (a) Each well shall be located no closer than 1650 feet from the outer boundary of the proration unit nor closer than 330 feet to any quarter section line, provided, however, that nothing contained herein shall be construed as permitting the drilling of more than one well on a spacing or proration unit.

(b) The operator of each well projected to and completed in the Badland Hills-Mancos Oil Pool shall conduct deviation tests on such well to determine the deviation from the vertical at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas.

(c) If the total deviation, assumed in a constant direction, indicates a horizontal displacement of the lowermost perforation, or the bottom of the hole in the case of an open-hole completion, of more than 330 feet from the surface location, no allowable shall be approved for the well unless a directional survey approved by the Division Director establishes a horizontal displacement of 330 feet or less, or unless the well has been approved for production, subject to a possible production penalty, after notice and hearing.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4(a) without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to a deeper horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the

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application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 6. A standard spacing or proration unit in the Badland Hills-Mancos Oil Pool (632 through 648 acres) shall be assigned a top allowable of 800 barrels of oil per day. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 640 acres.

IT IS FURTHER ORDERED THAT:

(3) The locations of all wells presently drilling to or completed in the Badland Hills-Mancos Oil Pool or in the Mancos formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Aztec district office of the Division in writing of the name and location of the well within 30 days from the date of this order.

(4) Pursuant to Paragraph A. of Section 70-2-18, N.M.S.A. 1987 Comp., contained in Laws of 1969, Chapter 271, existing oil wells in the Badland Hills-Mancos Oil Pool shall have dedicated thereto 640 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 640 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drilling to or completed in the Badland Hills-Mancos Oil Pool or in its corresponding vertical limits within one mile thereof, shall receive no more than one-half of a standard allowable for said pool.

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(5) This case shall be reopened at an examiner hearing in June, 1991, at which time the operator(s) in the subject pool may appear and show cause why the Badland Hills-Mancos Oil Pool should not be abolished and/or the special rules and regulations promulgated herein should not be rescinded.

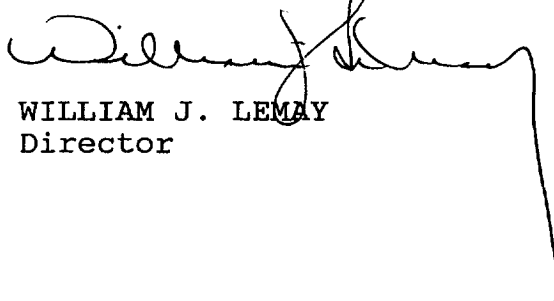
(6) Should continued development in this area prior to June, 1991, demonstrate that the acreage in said Section 15 is actually within the West Puerto Chiquito-Mancos Oil Pool, the Division Director shall have the authority, after notice and hearing, to abolish the Badland Hills-Mancos Oil Pool and concomitantly expand the boundary of the West Puerto Chiquito-Mancos Oil Pool.

(7) The effective date of the special rules and regulations promulgated herein shall be November 15, 1989.

(8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

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